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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/851,465	05/05/97	ROBINSON	E INT21246

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AIR MAIL

EXAMINER

COCKS, J

ART UNIT PAPER NUMBER

3743

DATE MAILED: 08/01/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/851,465

Applicant(s)

ROBINSON ET AL.

Examiner

Josiah C. Cocks

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on request for CPA filed 5/21/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Prosecution Application*

1. The request filed on 5/21/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/851,465 is acceptable and a CPA has been established. An action on the CPA follows.
2. Receipt of the preliminary amendment filed 6/11/01 is acknowledged.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nutten et al.* (US # 3,428,406) in view of *Bailey* (US # 3,597,134) and *Willms et al.* (US # 5,842,854).

*Nutten et al.* discloses in Figures 1-32 a liquid fuel burner assembly comprising an air aspirated nozzle (40), a compressor to provide air under positive pressure to the air aspirated nozzle, a zero pressure regulator (60), a fuel supply tank to supply fuel at ambient pressure to the air aspirated nozzle, the fuel entering the nozzle under negative pressure created by air entering

Art Unit: 3743

the air aspirated nozzle under positive pressure, a manual isolation valve (58), and pressure actuated arrangements for controlling flow of liquid fuel to the burner.

*Nutten et al.* possibly does not disclose a manual metering valve interposed between the liquid fuel supply and air aspirated nozzle which is adjustable during operation of the burner assembly or that the burner is an infrared burner.

*Bailey* teaches a liquid fuel burning apparatus having an adjustable fuel metering apparatus wherein the flow rate may be adjusted during operation of the burner (see col. 6, lines 45-55).

In regard to the limitation that the burner is an infrared burner, this limitation is considered simply a statement of intended use, adding no structural limitations to the claims. Further, as described in the *Willms et al.* patent, it is noted that infrared burner structure having a compressor/vacuum pump (40) with a metering element (90) for controlling fuel flow rate to control firing rate in a burner assembly is known. Therefore, it would have been simply a matter of design choice to incorporate the components of the *Nutten et al.* patent into an infrared burner.

In regard to claims 7 and 8, the isolation valve (58) is interposed (as broadly cited) between the compressor via the aspirator nozzle to the fuel tank. The valve having first and second positions, the first position allowing a vacuum created from the compressor to be applied to the fuel tank, and the second position isolating the compressor from the fuel tank. In regard to the limitation that the valve is positioned between the metering valve and the nozzle, this is considered an obvious matter of design choice as the use of isolation valves at differing positions in fuel lines is well known as evidenced by the prior art made of record, absent the showing of any new or unexpected results over the prior art of record.

Art Unit: 3743

Therefore, in regard to claims 1-9, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the burner of *Nutten et al.* to incorporate the fuel metering of *Bailey* for the desirable purpose of adjusting the fuel flow rate to control burner firing rate and as a result control the heating output of the burner assembly.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-9 are have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO 98/01031 is included to further show the state of the art concerning liquid fuel flow metering.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (703) 305-0450. The examiner can normally be reached on weekdays from 7:30 AM to 5:00 PM.

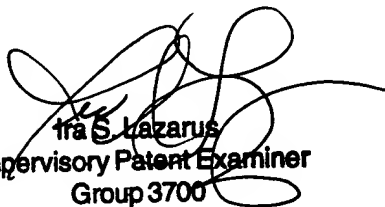
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus, can be reached at (703) 308-1935. The fax phone numbers for this Group are (703) 308-7764 for regular communications and (703) 305-3463 for After Final communications.

Art Unit: 3743

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

jcc

  
July 30, 2001

  
Ira S. Lazarus  
Supervisory Patent Examiner  
Group 3700